

PROCEEDINGS
OF THE
ZOOLOGICAL SOCIETY OF LONDON.

January 22, 1856.

Dr. Gray, F.R.S., in the Chair.

Mr. Yarrell stated to the Meeting that on the 3rd of January of the present year 1856, a great Bustard, *Otis tarda* of Linnæus, was taken in Berkshire. It was found about a mile from Hungerford, in the direction of Salisbury, by a boy, who observed that the bird had a broken leg, and could not, or did not, raise itself off the ground. He dragged it along by one wing to the farm to which he had been sent, where a man broke the bird's neck, that the boy might carry it back home the easier. The bird is now at Mr. Leadbeater's for preservation. It was a male, and appears to be in its second year.

The following papers were read:—

1. DESCRIPTION OF TWO NEW SHELLS DISCOVERED BY ROBERT
MACANDREW, ESQ. ON THE COAST OF NORWAY.
DESCRIBED BY ARTHUR ADAMS, R.N.

1. SCALARIA LOVENII, A. Adams. *S. testa pyramidali-turrita apice acuminata alba, anfractibus novem planiusculis, costis annularibus subdistantibus, angustis lamellatis recurvatis prope suturas latioribus et uncinatis costarum interstitiis valde spiraliter liratis, anfractu ultimo lira valida ad basin cincto; apertura rotundata.*

Hab. Ad litt. Scandinaviæ.

2. TRIFORIS MACANDRÆÆ, A. Adams. *T. testa pyramidali-turrita apice obtuso sinistrali tenuicula sordide alba, anfractibus quatuordecem rotundatis spiraliter liratis liris planis æqualibus subdistantibus (ad anfractum ultimum, sex) inter-*

stitiis sub lente longitudinaliter tenuissime striatis; apertura rotundata, canali brevi aperto.

Hab. Ad litt. Scandinaviæ.

2. DESCRIPTION OF THREE NEW VOLUTES FROM THE COLLECTIONS OF THE HON. MRS. CATHCART AND MR. CUMING.
BY LOVELL REEVE, F.L.S. & G.S.

(Mollusca, Pl. XXXIII.)

1. *VOLUTA CATHCARTIÆ.* *Vol. testa cylindraceo-oblonga, basi recurva, spira brevi, apice papillari, anfractibus superne concavo-declivibus, deinde subplanatis; columella quadriplicata, plicis basin versus descendente; apertura elongata, subangusta, labio simplici, curvato; aurantio-fulva, nigricante-purpureo trifasciatim interrupte maculata, maculis valde irregularibus et varie nebulatis, anfractuum sutura peculiariter punctata et maculata.*

Long. $3\frac{1}{2}$ poll.; lat. $1\frac{5}{8}$ poll.

Hab. — ?

This fine species of *Voluta*, from the collection of the Hon. Mrs. Macadam Cathcart, will not admit of defined comparison with any known species. It has somewhat the tone of colour and marking of *V. Pacifica*, but is of quite another typical form. The spire is short and largely papillary, and the plaits of the columella, four in number, descend elongately to the base.

2. *VOLUTA AMERICANA.* *Vol. testa subabbreviato-fusiforimi, spira exserta, turrata, apice vix papillari, anfractibus superne concavo-angulatis, ad angulum tuberculis rotundatis, interdum in plicis descendentes eleganter coronatis; columella superne arcuata, deinde callosa et quadriplicata, plica superna fere obsoleta, apertura subeffusa; pallida, fulvescente, aurantio-fusco trifasciatim interrupte maculata, et juxta suturam picta, interstitiis eximie reticulata.*

Long. $1\frac{3}{4}$ poll.; lat. $\frac{7}{8}$ poll.

Hab. Brazil.

Of very characteristic form, faintly banded and reticulated with orange-brown; also in the collection of the Hon. Mrs. Macadam Cathcart.

3. *VOLUTA AFRICANA.* *Vol. testa ovata, subventricosa, spira exserta, apice subpapillari, anfractibus superne concavo-angulatis, ad angulum tuberculato-nodatis, nodis interdum in costis descendentes, columella arcuata, basin versus biplicata, apertura subeffusa; fulvo-aurantia, lineis fuscis, punctis hieroglyphicis sparsim internotatis, in quaternis, fasciata, columella superne intense nigra.*

Long. $2\frac{1}{2}$ poll.; lat. $1\frac{1}{2}$ poll.

Hab. East coast of Africa.

This species, from Mr. Cuming's collection, partakes of the cha-





1.2. *Voluta Americana*. 3.4. *V. Africana*. 5.6. *V. Cathartæ*.

acters of *V. festiva* and *V. Hebræa*, but is of a totally distinct typical form, especially in respect of the columella, which is peculiarly arched, and has only two plaits at the base. The columella is stained at the top with the characteristic black spot of *V. festiva*.

3. NOTES ON THE SPECIES OF HIPPONYX INHABITING THE AMERICAN COASTS, WITH DESCRIPTIONS OF NEW SPECIES.

BY PHILIP P. CARPENTER.

The species of this genus have a helicoid apex when young, which is never persistent as in *Pileopsis* and *Calyptraidæ* proper. In many species the shape varies extremely, and is not to be taken alone as a specific distinction. The characters of the epidermis and basal margin are among the most constant.

1. HIPPONYX ANTIQUATUS, Linn.

Patella antiquata, Linn. Syst. Nat. p. 1259; Dillw. p. 1035, no. 44.

Le Soron, Adans. Sen. p. 32, pl. 2, f. 3 = *P. nivea*, Gmel.

Pileopsis mitrula, Lam. An. s. Vert. vii. p. 610, no. 2.

Capulus mitrula, Dunker, Ic. Moll. Guin. p. 36, no. 99. D'Orb. Sagra Moll. ii. p. 186.

Hipponyx mitrula, Sow. P. Z. S. 1835, p. 5.

Hipponyx antiquatus, Menke, Zeit. f. Mal. 1853, p. 79.

Concholepas antiquatus, H. & A. Adams, Gen. i. p. 373.

Hipponyx Panamensis, C. B. Adams, Pan. Shells, p. 218, no. 328.

Amalthea Panamensis, H. & A. Adams, Gen. i. p. 374.

Hab. West Indies, passim. W. Africa: Senegal, *Adanson*; Loander, *Tams*; St. Vincent, *Schmidt*. W. America: Lobos Island, Peru, *Cuming*; Panama, *C. B. Adams*.

Base rounded, not crenated; outside foliated, with faint radiating striæ. Deshayes (from descriptions) doubts the identity of the African and Caribbæan shells. Menke and Dunker confirm it: "possidemus hanc cochleolam e remotissimis terræ regionibus allatam" (*Dunker*). Sowerby's species was described from Pacific shells. C. B. Adams, for geographical reasons, doubts their identity, and names them *H. Panamensis*; "the apex being less prominent, the concentric laminæ more numerous, and the radiating striæ more deeply impressed." All these are very variable characters in the true *H. antiquata*, as well as in the Pacific specimens.

2. HIPPONYX SERRATUS, B. M. Cat. Mazatlan Moll.

H. foliaceus, Menke, Zeit. f. Mal. 1851, p. 36, no. 129, non Quoy & Gaim.

Outside like *H. antiquata*; base flattened, broad, with numerous serrated laminæ separated by brown epidermis in shreds. Muscular scar corrugated. This species is only yet known from Mazatlan.—*Lieut. Shipley*; *Brit. Mus. Coll.*

3. HIPPONYX BARBATUS, Sow. P. Z. S. 1835, p. 5. C. B. Adams, Pan. Shells, p. 217, no. 327.

Hipponyx australis, Menke, Zeit. f. Mal. 1847, p. 186, no. 38; non *H. australis*, Desh. (= *Patella australis*, Lamk.)

Outside with close radiating lines of bristly hairs; base round, smooth, crenated at the outer edge. The shell is quoted with doubt by C. B. Adams, because of the difference in zoological province.

Hab. Society Islands, *Cuming*; Panama, *C. B. Adams*; Mazatlan, *Brit. Mus. Coll.*; Atooi, Sandwich Islands, *Nuttall*.

3 (b). HIPPONYX ? BARBATUS, var. COSTELLATUS. *H. t.* "*H. barbatae*" *simili*; *sed costis paucioribus, validioribus; apice subcentrali; setis minoribus, tenuioribus.*

Long. .5; lat. .42; alt. .27 poll.

Hab. ? Ad insulas Maris Caribbæi.

This may prove a distinct species, but is only described from a single specimen in my collection, of which I can give no exact authority for the locality. It has the exterior of *H. Grayanus*, with the base of *H. barbatus*.

✓ 4. HIPPONYX (AMALTHEA) GRAYANUS, Menke, Zeit. f. Mal. 1853, p. 115.

Hipponyx radiata, Gray, P. Z. S. 1835. C. B. Adams, Panama Shells, p. 218, no. 329. Menke, Zeit. f. Mal. 1853, p. 79; non *H. radiata*, Quoy & Gaimard, 1824; nec *H. radiata*, Desh. 1830, (= *H. crista*, Menke).

Hab. Gallapagos, *Cuming*; Sandwich Islands, on Pinna, *Nuttall*; Panama, *C. B. Adams*; S.W. Mexico, on Pinna, *P. P. C.*; Mazatlan, *Brit. Mus. Coll.*; St. Vincent (W. Africa), *Schmidt*, teste *Menke*.

Apex subcentral; ribs fewer, coarser and more nodulous than in *H. barbata*, with softer, smaller, fewer, and more irregular hairs; base flat, not very broad, rather rounded at the inner margin, crenated at the outer, with numerous lamellæ, undulated but not serrated.

✓ 5. HIPPONYX SUBRUFUS, Lam.

Pileopsis subrufa, Lam. An. s. Vert. vii. p. 611, no. 4.

Hipponyx subrufa, Sow. P. Z. S. 1835, p. 5. (Non *P. militaris*, Dillw., ut ? credit Desh.)

Capulus subrufus, D'Orb. Sagra Moll., ii. 186, pl. 24, f. 24, 25.

Hipponyx —, sp. ind., C. B. Adams, Panama Shells, p. 217, no. 326.

Concholepas subrufa, H. & A. Adams, Gen. i. p. 373.

Lamarck's shell was described from W. Indian specimens, Sowerby's from Peruvian. There does not appear, however, any specific distinction between the two. Shell of a pinkish red, with full, recurved umbo, and finely cancellated surface; base round, simple.

Hab. W. Indies, passim; Lobos Island, Peru, *Cuming*; ? Panama, *C. B. Adams*.

The figure of *H. subrufus*, jun. in Sow. Thes. Conch. pl. 73. f. 21, is much more like the young of *H. barbatus*.

6. HIPPONYX TUBERCULATUS, n. s. *H. t. solida, conica, subrufa; apice subcentrali; costis radiantibus creberrimis, concentricæ tuberculosis, interstitiis minimis; epidermide incon-*